



*A nationally represented uninterruptible power supply (UPS) company. The company's focus is to provide a full range of quality UPS products and solutions for SOHO, PC and SME network environments and for a variety of applications in telecommunications, medical, security, lighting and industry as well as innovative solutions for the specialised needs of major corporates and government.*

***Our commitment is to supply quality products at competitive prices with strong emphasis on differentiation through outstanding services and support.***

## **THE PRODUCT**

The **MaxiT** & **Tower** ranges of UPS units are designed and manufactured in South Africa to meet South African conditions and provide the highest reliability possible in support of the critical types of loads it supplies.

The design philosophy is based on:

- Advanced techniques.
- Simplicity of design and minimised use of components.
- Utilising a quality manufacturing process.
- Rigorous testing to ensure that when the product is placed in service it will deliver many years of trouble free operation.
- Ease of service.
- All units are housed in compact aesthetically pleasing cabinets, which include a user friendly digital front panel.
- A static and manual switch are included as standard to enhance reliability and ease of maintenance.



***The easy to operate digital front panel provides the user with voltage and current.***



**MaxiT, 10kVA unit. Innovative design with internal space for batteries and easy access to all components.**

- ❑ All units are extremely efficient and based on the PWM design using IGBT power devices. As a result the units operate at a very low noise level.
- ❑ The units are suited for any type of load from switch mode power supplies as found in computers, to industrial type loads such as rectifiers, motors, etc.

## **TWO RANGES ARE AVAILABLE:**

### **◆ MaxiT Range**

The single conversion reactive on-line design ensures that the output remains controlled within very close limits, with low output distortion.

Some advantages of the design are the high input power factor (typically 0,97) and high efficiency (typically 95%).

All units have a single phase input and single phase output. Units are rated at 5kVA, 8kVA, 10kVA, 15kVA and 20kVA.

### **◆ Tower Range**

This range is based on the double conversion design using a 6-pulse rectifier on all models.

An optional filter is available to limit the input harmonics should this be required.

As with the **MaxiT** range, the output voltage is controlled within close limits with low output distortion.

All units have a three phase input and single phase output. Units are rated at 10kVA, 15kVA, 20kVA.

## **PROTECTION CIRCUITS**

The UPS units are fully protected against internal and external faults via circuit breakers and fast acting fuses.

The battery is protected against overcharging by a DC detection circuit that isolates the charger circuit should the DC voltage exceed a certain critical safety level.

### ***The following switchgear is used:***

Input circuit breaker, Output isolator, Bypass Isolator and Fused isolator for batteries.



**Tower, 20kVA unit. Compact design, easy access to all components.**

## COMMUNICATION INTERFACE PORT

All units are supplied as standard with advanced multi-protocol CPU communication which allows full function remote analyses from any computer environment via an RS232 interface and UPSILON software.

The unit is SNMP compatible.

## DIGITAL DISPLAY

The 20 character, 2-line digital display provides simultaneous information for input voltage, output voltage, output current, output frequency as well as DC voltage.

When a fault occurs, an alarm will sound and the fault will be indicated on the display.

### ***The alarms monitored are:***

High DC shutdown, UPS overload, Battery discharging, Low DC shutdown, Battery critical, Load on Bypass, Over-temperature, Input out of limits.

## REMOTE MONITORING

Voltage free contacts are provided for connection to a remote alarm panel (available as optional extra) or to the clients building management system.

## MAINTENANCE FREE BATTERIES

The standard batteries used are the maintenance free types with projected life spans of 3 to 5 years. The batteries are housed either inside the UPS cabinets or in separate matching cabinets.

Where requested, different types of batteries giving longer life or run times are available to meet specific requirements.

## SERVICEABILITY

The **MaxiT** and **Tower** ranges have been designed with service in mind. Ease of access to parts, few PC cards and ease of replacement of power components sets this design apart from other similar products.



***The type of information available from the 'Smart' UPSILON software for Windows and most other operating platforms.***



***The External battery cabinet matches the UPS cabinet and ensures a neat installation. For ease of maintenance the batteries are mounted on trays which can be easily installed or removed.***



<b>TECHNICAL SPECIFICATIONS</b>		
<b>MODEL</b>	<b>MaxiT</b>	<b>Tower</b>
<b>INPUT</b>		
Voltage (V AC)	230 Volt $\pm$ 15% (Special units $\pm$ 30%)	230 Volt $\pm$ 12%
Frequency (HZ)	50HZ $\pm$ 5%	50HZ $\pm$ 5%
Phase	Single phase	Three phase
Input Power Factor	up to 0,99	> 0,82
<b>OUTPUT</b>		
Capacity	5kVA, 8kVA, 10kVA, 15kVA, 20kVA	10kVA, 15kVA, 20kVA
Voltage (V AC)	230 Volt, single phase	
Rated Power Factor	0,7 Lagging	
Load Power Factor Range	0,5 Lagging to Unity within kW rating of unit	
Wave Form	Sine Wave, THD <5% (no load to full load) – Typically 3%	
Voltage Regulation	$\pm$ 1%	
Overload Capability	200% for 15 seconds. Short circuit capability without damage	
Transient Response	$\pm$ 5% under full load change and recovery within 30ms	
Frequency Stability	$\pm$ 0.05% (Free Running)	
Synchronization	Slew Rate: 1 HZ/sec.	
Crest Factor	3 : 1	
Static Switch Rating	1000% for 100ms	
Static Switch Transfer Time	0ms	
<b>GENERAL</b>		
Operating Temperature Range	0° to 40° C, up to 90% humidity	
Altitude	0-2000m without derating	
Noise	<50 dB (at 1 metre)	<52 dB (at 1 metre)
Lightning Protection	Designed to withstand standard test impulses of 6kV and 3kA	
System Efficiency (AC/AC)	>95%	>90%
<b>BATTERY</b>		
Type	Maintenance Free Lead Acid	
Recharge Time	6 hours to 90%	
Discharge Time (Minimum)	From 8 minutes to 25 minutes depending on model	
Battery INT/EXT (standard configuration)	All models Internal	10kVA, 15kVA & 20kVA External
<b>DIMENSIONS</b>		
Short Cabinet (mm)	370 (W) x 650 (D) x 550 (H) 5kVA, 8kVA & 10kVA only Includes battery for standard configuration	
Tall Cabinet (mm)	370 (W) x 650 (D) x 850 (H) Available all models Includes battery for standard configuration	370 (W) x 650 (D) x 850 (H) 10kVA, 15kVA & 20kVA external cabinet
Weights (kg) (Includes internal battery where applicable)	5kVA (115kg), 8kVA (130kg), 10kVA (155kg), 15kVA (195kg), 20kVA (220kg)	10kVA(95kg), 15kVA (120kg), 20kVA (150kg)
External Battery Cabinet (mm)	370 (W) x 650 (D) x 850 (H)	
Weight of Battery Cabinet with three sets of batteries	260kg	
<b>COMPUTER INTERFACE</b>		
Interface Type	RS232 Interface	
Protocol	MegaTec UPSilon software	
SNMP Adaptability	External SNMP adapter available (option)	
Standard Bundled Software	UPSilon for Novell Netware, Windows 98/2000, Windows NT	
Optional Software	UPSilon for UNIX	
<b>NOTES</b>		
The above specifications are subject to change without prior notice.		
Trademarks of MegaTec, UPSilon, Novell Netware, Windows, and UNIX, are registered trademarks of their respective companies.		